IN THE CLAIMS:

1. (Currently Amended) A system comprising ~~means for~~configured to execute ~~executing~~ application sessions in an electronic device with one or more processors, and ~~means for~~to schedule ~~scheduling~~ Rresource Rreservation Iinstances as well as ~~the execution of~~to execute substantially simultaneous application sessions, wherein ~~the~~an application session to be executed comprises one or more Aactivity Bblocks in one or more Aactivity Bblock Ccontainers, and an execution order is specified for said Aactivity Bblocks; the system further comprising resource type specific Rresource Hhandlers for reserving resources for the application session, Rresource Aallocation Mmanager for analysing and saving the resource allocation situation, Aapplication Ssession Mmanagement and Sscheduling ~~means~~manager for selecting at least the next application session and Aactivity Bblock to be executed on the basis of said resource allocation situation, said system configured to execute~~executing means~~ ~~for executing~~ the next Aactivity Bblock in the course of the selected application session, and the system is provided with a protocol connecting the Rresource Hhandlers, Rresource Aallocation Mmanager, Aapplication Ssession Mmanagement and Sscheduling manager ~~means and executing means~~, to control the execution order and to implement the transfer of information between said Rresource Hhandlers, Rresource Aallocation Mmanager, Aapplication Ssession Mmanagement and Sscheduling ~~means~~manager, ~~and executing means~~ the system further comprising an operating system with scheduling functions, and for synchronizing the reservation, release and other resource-related control from the application session management and scheduling manager, activity block containers, resource allocation manager, and resource handlers, there is a session control protocol comprised of application-independent control messages and rules on use thereof, which is arranged during operation to implement the synchronization and scheduling control of the execution of the application session management and scheduling manager, the activity block containers, the resource allocation manager, as well as the resource handlers, based on task switching functions of the operating system as well as ~~OS~~ task priorities of the operating system defined for the application session management and scheduling manager, the activity block containers, the resource allocation manager, and the resource handlers.

2. (Currently Amended) The system in accordance with Claim 1, ~~comprising~~ ~~means~~configured for bookkeeping of the resource allocation situation, ~~means~~configured for

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transmitting a first control message to an ~~A~~activity ~~B~~block to provide control information on the resource allocation to the ~~A~~activity ~~B~~block at the time of the initiation of the ~~A~~activity ~~B~~block, and ~~means~~ for transmitting a second control message at the time of the completion of the execution of the ~~A~~activity ~~B~~block to provide information about the resources reserved or released by the ~~A~~activity ~~B~~block to update the bookkeeping of the resource allocation situation after the completion of each ~~A~~activity ~~B~~block.

3. (Currently Amended) The system according to Claim 2, ~~comprising means~~configured for an application session to reserve the resources needed by each ~~A~~activity ~~B~~block, as well as to release them, either directly from the resource type specific ~~R~~resource ~~H~~handlers or from the ~~R~~resource ~~A~~allocation ~~M~~manager that enable the queuing of reservation request messages, on the basis of control parameters received in a first control message received from ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~manager.

4. (Currently Amended) The system in accordance with Claim 2, ~~comprising means~~configured for making the ~~R~~resource ~~R~~reservation ~~I~~instances created on a request from the application session, via the use of second ~~C~~control messages, dynamically available to different ~~A~~activity ~~B~~block ~~C~~containers involved in the execution of the session, as needed.

5. (Cancelled)

6. (Currently Amended) The system in accordance with the Claim 1, comprising a ~~R~~resource ~~I~~instance ~~T~~table per each ~~R~~resource ~~H~~handler to provide the resource allocation situation to said resource allocation manage~~rment and allocation means~~, and the synchronization of the ~~R~~resource ~~A~~allocation ~~M~~manager with respect to the ~~R~~resource ~~H~~handlers is arranged to be determined so that substantially immediately after each execution turn of the ~~R~~resource ~~H~~handlers it is the turn of the ~~R~~resource ~~A~~allocation ~~M~~manager, wherein the resource allocation situation is unambiguously known in the ~~R~~resource ~~I~~instance ~~T~~tables regarding ~~the latest~~most lately occurring changes ~~occurred~~.

7. (Currently Amended) The system in accordance with Claim 6, wherein the synchronization of the ~~R~~resource ~~A~~allocation ~~M~~manager with respect to the ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~manager is determined so that substantially immediately after each execution turn of the ~~R~~resource ~~A~~allocation ~~M~~manager it is the turn of the

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Aapplication Ssession Mmanagement and Sscheduling meansmanager, wherein the resource allocation situation is unambiguously known regarding the latest changes to have occurred, and values can be determined by the Aapplication Ssession Mmanagement and Sscheduling meansmanager for the parameters of the control messages generated by it for the synchronization of the use of various types of Rresource Rreservation Iinstances.

8. (Currently Amended) The system in accordance with the Claim 1, wherein an Eend Sstate Mmodule is placed at the end of each Aactivity Bblock to complete the execution of the block, and a Wwaiting Sstate Mmodule is placed in the Aactivity Bblock Ccontainer holding the Aactivity Bblock, and that the execution control of the Aactivity Bblock Ccontainer holding the Aactivity Bblock is arranged to generate a second Ccontrol message in the Eend Sstate Mmodule and to pause the execution in the Wwaiting Sstate Mmodule in order to wait for a first control message from the Aapplication Ssession Mmanagement and Sscheduling meansmanager, wherein the execution of the application session is temporarily interrupted regarding the current Aactivity Bblock Ccontainer.

9. (Currently Amended) The system in accordance with Claim 8, wherein the Aapplication Ssession Mmanagement and Sscheduling meansmanager are arranged to analyse the resource allocation situation and the scheduling of the sessions to be executed to detect an overload condition of one or more resources and to manage it by replacing, as needed, application sessions with other application sessions requiring less resources, or by delaying, as needed, the transmission of first control messages to the application sessions, which results in a temporary suspension of the ongoing application session or in a delayed initiation of a new application session.

10. (Currently Amended) The system in accordance with the Claim 1, wherein the Aactivity Bblocks of the application session are placed in one or more Aactivity Bblock Ccontainers, that Aactivity Bblocks in any one of these Aactivity Bblock Ccontainers are arranged to be executed temporally at different times, and in the presence of Aactivity Bblocks that are intended to be executed substantially at the same time in the course of the session, they are placed in different Aactivity Bblock Ccontainers.

11. (Currently Amended) The system in accordance with Claim 10, wherein for designing applications that are to be executed in the system, each Aactivity Bblock Ccontainer is

furnished with an interface module at those points where the execution of an ~~A~~activity ~~B~~block or the ~~A~~activity ~~B~~block ~~C~~container can be interrupted and it may be the turn of another ~~OS~~operating system task to be executed, thus enabling the sending and reception of ~~S~~session ~~C~~control ~~P~~protocol messages to take place via this interface of the ~~A~~activity ~~B~~block ~~C~~container without a need to deal with these messages of the protocol as part of the application design work.

12. (Currently Amended) The system in accordance with the Claim 1, wherein the ~~R~~resource ~~H~~handlers are equipped with an interface for transmitting information between each ~~R~~resource ~~H~~handler and the system, this interface being substantially independent of the application session and the resource type.

13. (Currently Amended) The system in accordance with the Claim 1, comprising a dedicated ~~R~~resource ~~I~~instance ~~T~~table in the use of each ~~R~~resource ~~H~~handler, and the ~~R~~resource ~~H~~handlers are designed to be without intermediate delayed states, wherein the changes of the status data of individual ~~R~~resource ~~R~~reservation ~~I~~instances are stored in the ~~R~~resource ~~I~~instance ~~T~~table of each ~~R~~resource ~~H~~handler.

14. (Currently Amended) The system in accordance with the Claim 1, wherein the ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~manager ~~are~~ is associated with a ~~S~~session ~~H~~history ~~T~~table and the ~~R~~resource ~~A~~allocation ~~M~~manager ~~are~~ is associated with a ~~R~~resource ~~A~~allocation ~~T~~table, and the ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~ manager and the ~~R~~resource ~~A~~allocation ~~M~~manager are designed to be without intermediate states, wherein ~~the~~ changes of session-related status information is stored in said ~~S~~session ~~H~~history ~~T~~table, and ~~the~~ changes of session-related information of ~~R~~resource ~~R~~reservation ~~I~~instances are stored in said ~~R~~resource ~~A~~allocation ~~T~~table.

15. (Currently Amended) The system in accordance with the Claim 1, ~~comprising means~~ ~~ASM~~configured to determine ~~the~~ a load condition of ~~the~~at least one processor of said one or more processors and to adjust the power consumption of the at least one processor on the basis of the load condition through ~~the~~ scheduling of ~~the~~ activities of the application sessions.

16. (Currently Amended) A method for executing application sessions in an electronic device with one or more processors for synchronizing ~~R~~resource ~~R~~reservation ~~I~~instances as well as

the execution of substantially simultaneous application sessions, wherein the application session to be executed comprises one or more ~~A~~activity ~~B~~blocks in one or more ~~A~~activity ~~B~~block ~~C~~containers, and an execution order is determined for said ~~A~~activity ~~B~~blocks, the method comprising at least the following ~~steps~~:

- ~~a~~ resource management and allocation ~~step~~ for requesting and reserving resources for the application session,

- ~~a~~ bookkeeping and analysis ~~step~~ for saving and analysing the resource reservation situation,

- ~~a~~ scheduling and selection ~~step~~ for selecting the next application session and ~~A~~activity ~~B~~block to be executed at least on the basis of said resource reservation situation,

- ~~an execution step for~~ executing the next ~~A~~activity ~~B~~block in the course of the selected application session,

wherein in the method, a communication protocol connecting said resource management and allocation ~~step~~, bookkeeping and analysis ~~step~~, scheduling and selection ~~step~~, and the executing ~~on step~~ are used to control the execution order and, if necessary, to transfer information between said resource management and allocation ~~step~~, bookkeeping and analysis ~~step~~, scheduling and selection ~~step~~, and executing ~~on step~~

wherein in the method, an operating system is utilized comprising task switching functions, and that for synchronizing the reservation, release and other resource-related control from the application session management and scheduling manager, activity block containers, resource allocation manager and the resource handlers, there is a session control protocol comprised of application-independent control messages and rules on use thereof, which is arranged, during operation, to implement synchronization and scheduling control of the execution of the application session management and scheduling manager, the activity block containers, the resource allocation manager, as well as the resource handlers, on the basis of the task switching functions of the operating system as well as the task priorities of the operating system defined for the application session management and scheduling manager, the activity block containers, the resource allocation manager, and the resource handlers.

17. (Currently Amended) The method in accordance with Claim 16, wherein a bookkeeping of the resource allocation is maintained, and an first control message is transmitted to an ~~A~~activity ~~B~~block to provide control information on the resource allocation at the time of the initiation of the ~~A~~activity ~~B~~block, and a second ~~C~~control message is returned by the ~~A~~activity

Bblock to provide information about the resources reserved or released by the Aactivity Bblock to update the bookkeeping of the resource allocation situation after the completion of each Aactivity Bblock.

18. (Currently Amended) The method in accordance with Claim 17, wherein the resources needed by each Aactivity Bblock are reserved and released by the application session, either directly from resource type specific Rresource Hhandlers or from the Rresource Aallocation Mmanager that enable the queuing of Rreservation Rrequest messages, on the basis of control parameters received in a first control message received from Aapplication Ssession Mmanagement and Sscheduling means manager.

19. (Currently Amended) The method in accordance with Claim 17, wherein second control messages are used by the application session to dynamically assign Rresource Rreservation Iinstances to the use of different Aactivity Bblock Ccontainers involved in the execution of the session, as needed.

20. (Cancelled)

21. (Currently Amended) The method in accordance with the Claim 16, wherein in the method, a Rresource Iinstance Ttable is used per each Rresource Hhandler to provide the resource allocation situation to said Rresource Aallocation Mmanager, and the synchronization of the bookkeeping and analysis step with respect to the resource management and allocation step of the Rresource Hhandlers is determined so that substantially immediately after each execution turn of the Rresource Hhandlers, it is the turn of the bookkeeping and analysis step, wherein the resource allocation situation is unambiguously known in the Rresource Iinstance Ttables regarding the changes that have occurred.

22. (Currently Amended) The method in accordance with Claim 21, wherein the scheduling of the scheduling and selection step with respect to the bookkeeping and analysis step is determined so that the scheduling and selection step is in turn substantially immediately after the execution of the bookkeeping and analysis step, wherein the resource allocation situation is unambiguously known in the Rresource Aallocation Ttable regarding the latest changes occurred, and values can be determined by the Aapplication Ssession Mmanagement and

~~S~~scheduling ~~means~~ manager for the parameters of the control messages generated by it for the synchronization of the use of various types of ~~R~~resource ~~R~~reservation ~~I~~instances.

23. (Currently Amended) The method in accordance with the Claim 16, wherein an ~~E~~end ~~S~~state ~~M~~module is placed at the end of each ~~A~~activity ~~B~~block to complete the execution of the block, and a ~~W~~waiting ~~S~~state ~~M~~module is placed in the ~~A~~activity ~~B~~block ~~C~~container holding the ~~A~~activity ~~B~~block, and the execution control of the ~~A~~activity ~~B~~block ~~C~~container holding the ~~A~~activity ~~B~~block generates a second control message in the ~~E~~end ~~S~~state ~~M~~module and pauses the execution in the ~~W~~waiting ~~S~~state ~~M~~module in order to wait for an first control message from the ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~ manager, wherein the execution of the application session is temporarily interrupted regarding the current ~~A~~activity ~~B~~block ~~C~~container.

24. (Currently Amended) The method in accordance with Claim 23, wherein the ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~ manager analy~~se~~zes the resource allocation situation and the scheduling of the sessions to be executed to detect an overload condition of one or more resources and to manage it by replacing, as needed, application sessions with other application sessions requiring less resources, or by delaying, as needed, the transmission of first control messages to the application sessions, which results in a temporary suspension of the ongoing application session, or in a delayed initiation of a new application session.

25. (Currently Amended) The method in accordance with the Claim 16, wherein the ~~A~~activity ~~B~~blocks of the application session are placed in one or more ~~A~~activity ~~B~~block ~~C~~containers, ~~A~~activity ~~B~~blocks in any one of these ~~A~~activity ~~B~~block ~~C~~containers are executed temporally at different times, and in the presence of ~~A~~activity ~~B~~blocks that are intended to be executed substantially at the same time in the course of the session, they are placed in different ~~A~~activity ~~B~~block ~~C~~containers.

26. (Currently Amended) The method in accordance with Claim 25, wherein for designing applications that are to be executed in the system, each ~~A~~activity ~~B~~block ~~C~~container is furnished with an interface module at those points where the execution of an ~~A~~activity ~~B~~block or ~~A~~activity ~~B~~block ~~C~~container can be interrupted and it may be the turn of another ~~O~~operating ~~S~~system task to be executed, thus enabling the sending and reception of ~~S~~session

Ccontrol Pprotocol messages to take place via this interface of the Aactivity Bblock Ccontainer without a need to deal with these messages of the Ssession Ccontrol Pprotocol as part of the application design work.

27. (Currently Amended) The method in accordance with Claim 16, wherein the Rresource Hhandlers are equipped with an interface for transmitting information between each Rresource Hhandler of the system, this interface being substantially independent of the application session and the resource type.

28. (Currently Amended) The method in accordance with Claim 16, wherein a dedicated Rresource Iinstance Ttable is in the use of each Rresource Hhandler, and the Rresource Hhandlers are designed to be without intermediate delayed states, wherein the changes of the status data of individual Rresource Rreservation Iinstances are stored in the Rresource Iinstance Ttable of each Rresource Hhandler.

29. (Currently Amended) The method in accordance with Claim 16, wherein a Ssession Hhistory Ttable is in the use of the scheduling and selection step, and a Rresource Aallocation Ttable is in the use of the bookkeeping and analysis step, the resource management and allocation step, bookkeeping and analysis step, as well as scheduling and selection step are designed to be without intermediate delayed states, wherein the changes of session-related status information is stored in said Ssession Hhistory Ttable, and the changes of session-related information of the Rresource Rreservation Iinstances are stored in said Rresource Aallocation Ttable.

30. (Currently Amended) The method in accordance with Claim 16, wherein the a load condition of the processor is determined, and the power consumption of the processor is adjusted based on the basis of the load condition through the scheduling of the activities of the application sessions.

31. (Currently Amended) An electronic device comprising means for executing one or more processors configured to execute application sessions, one or more processors, and means for schedulingconfigured to schedule Rresource Rreservation Iinstances as well as the execution of substantially simultaneous application sessions, wherein the application session to be executed comprises one or more Aactivity Bblocks in one or more Aactivity Bblock

Ccontainers, and an execution order is determined for said Aactivity Bblocks; the electronic

device further comprising resource type specific Rresource Hhandlers for reserving resources

for the application session, Rresource Aallocation Mmanager for analysinganalyzing and

saving a resource allocation situation, Aapplication Ssession Mmanagement and Sscheduling

means manager for selecting at least the next application session and Aactivity Bblock to be

executed based on the basis of said resource allocation situation, executing means and for

executing the a next Aactivity Bblock in the course of the selected application session; and

the electronic device is provided with a protocol connecting the Rresource Hhandlers,

Rresource Aallocation Mmanager, Aapplication Ssession Mmanagement and Sscheduling

means manager and executing means, to control the execution order and to implement the

transfer of information between said Rresource Hhandlers, Rresource Aallocation Mmanager,

Aapplication Ssession Mmanagement and Sscheduling means manager, and executing means

the electronic device further comprising

an operating system with scheduling functions, and for synchronizing reservation, release and

other resource-related control from the application session management and scheduling

manager, activity block containers, resource allocation manager, and resource handlers,

wherein there is a session control protocol provided comprisinged of application-independent

control messages and rules on use thereof, that is arranged during its operation to implement

synchronization and scheduling control of execution of the application session management

and scheduling manager, the activity block containers, the resource allocation manager, as

well as the resource handlers, on the basis of the task switching functions of the operating

system as well as the OS Operating System task priorities defined for the application session

management and scheduling means manager, the activity block containers, the resource

allocation manager, and the resource handlers.

32. (Currently Amended) An A wireless communication device comprising one or more

processors configured to execute means for executing application sessions, one or more

processors, and means for schedulingand configured to schedule Rresource Rreservation

Iinstances as well as the execution of substantially simultaneous application sessions, wherein

thean application session to be executed comprises one or more Aactivity Bblocks in one or

more Aactivity Bblock Ccontainers, and an execution order is determined for said Aactivity

Bblocks; the wireless communication device further comprising resource type specific

Rresource Hhandlers for reserving resources for the application session, Rresource

Aallocation Mmanager for analyzingsing and saving a resource allocation situation,

~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~ Manager for selecting at least ~~the~~ a next application session and ~~A~~activity ~~B~~block to be executed based on ~~the basis of~~ said resource allocation situation, ~~executing means~~and for executing the next ~~A~~activity ~~B~~block in the course of the selected application session~~;~~ and the electronic device is provided with a protocol connecting the ~~R~~resource ~~H~~handlers, ~~R~~resource ~~A~~allocation ~~M~~manager, ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling ~~means~~manager~~ and executing means~~, to control the execution order and to implement the transfer of information between said ~~R~~resource ~~H~~handlers, ~~R~~resource ~~A~~allocation ~~M~~manager, ~~A~~application ~~S~~session ~~M~~management and ~~S~~scheduling~~ means~~ manager, ~~and executing means~~

the wireless communication device further comprising

an operating system with scheduling functions, and for synchronizing reservation, release and other resource-related control from the application session management and scheduling manager, activity block containers, resource allocation manager, and resource handlers, and comprising a session control protocol comprised of application-independent control messages and rules on their use, which is arranged during operation to implement the synchronization and scheduling control of execution of the application session management and scheduling manager, the activity block containers, the resource allocation manager, as well as the resource handlers, based on the task switching functions of the operating system as well as the operating system task priorities defined for the application session management and scheduling manager, the activity block containers, the resource allocation manager, and the resource handlers.

33. (Currently Amended) A computer readable medium having a computer~~software~~ program stored thereon comprising machine executable ~~steps~~instructions for executing application sessions in an electronic device with one or more processors for synchronizing ~~R~~resource ~~R~~reservation ~~I~~instances as well as the execution of substantially simultaneous application sessions, wherein the application session to be executed comprises one or more ~~A~~activity ~~B~~blocks in one or more ~~A~~activity ~~B~~block ~~C~~containers, and an execution order is determined for said ~~A~~activity ~~B~~blocks, the computer~~software~~ program further comprising machine executable instructions~~steps~~ for performing at least the following~~ steps~~:

- ~~a resource management and allocation step for~~ requesting and reserving resources for the application session,

- ~~a bookkeeping and analysis step for~~ saving and analy~~sing~~zing the resource reservation situation,
- ~~a scheduling and selection step for~~ selecting the next application session and ~~A~~activity ~~B~~block to be executed at least on the basis of said resource reservation situation,
- ~~an execution step for~~ executing the next ~~A~~activity ~~B~~block in the course of the selected application session,

wherein the computer~~software~~ program also comprises machine executable instructions~~steps~~ for using a communication protocol connecting said requesting and reserving resources for the application session ~~resource management and allocation step~~, saving and analyzing the resource reservation situation~~bookkeeping and analysis step~~, selecting the next application session and activity block to be executed~~scheduling and selection step~~, and executing the next activity blocks,~~the execution step to control the execution order and, if necessary, to transfer information between said resource management and allocation step, bookkeeping and analysis step, scheduling and selection step, and execution step~~

wherein the computer program is configured to utilize an operating system comprising task switching functions, and that for synchronizing reservation, release and other resource-related control from an application session management and scheduling manager, activity block containers, resource allocation manager and the resource handlers, there is provided a session control protocol comprised of application-independent control messages and rules on use thereof, which is arranged, during operation, to implement synchronization and scheduling control of execution of the application session management and scheduling manager, the activity block containers, the resource allocation manager, as well as the resource handlers, based on the task switching functions of the operating system as well as operating system task priorities defined for the application session management and scheduling manager, the activity block containers, the resource allocation manager, and the resource handlers.

34. (New) An electronic device comprising means for executing application sessions, one or more processors, and means for scheduling resource reservation instances as well as the execution of substantially simultaneous application sessions, wherein the application session to be executed comprises one or more activity blocks in one or more activity block containers, and an execution order is determined for said activity blocks; the electronic device further comprising resource type specific resource handlers for reserving resources for the application session, resource allocation manager for analyzing and saving a resource

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allocation situation, application session management and scheduling means for selecting at least the next application session and activity block to be executed on the basis of said resource allocation situation, executing means for executing the next activity block in the course of the selected application session; and the electronic device is provided with a protocol connecting the resource handlers, resource allocation manager, application session management and scheduling means and executing means, to control the execution order and to implement the transfer of information between said resource handlers, resource allocation manager, application session management and scheduling means, and executing means.
the electronic device further comprising
an operating system with scheduling functions, and for synchronizing the reservation, release and other resource-related control from the application session management and scheduling means, activity block containers, resource allocation manager, and resource handlers, there is a session control protocol composed of application-independent control messages and rules on use thereof, that is arranged during its operation to implement synchronization and scheduling control of execution of the application session management and scheduling means, the activity block containers, the resource allocation manager, as well as the resource handlers, on the basis of the task switching functions of the operating system as well as the operating system task priorities defined for the application session management and scheduling means, the activity block containers, the resource allocation manager, and the resource handlers.